$Mg(BH_4)_2$, $Ca(BH_4)_2$, NH_4BH_4, $(CH_3)_4NBH_4$, $NaAlH_4$, $LiAlH_4$, $KAlH_4$, $NaGaH_4$, $LiGaH_4$, $KGaH_4$, and mixtures thereof. Without wanting to be limited by any one theory, it is believed that metal hydrides, especially borohydrides, are most stable in water at basic pH's, i.e., the metal hydrides do not readily decompose when in contact with water at high pH's. The following borohydrides are preferred: sodium borohydride ($NaBH_4$), lithium borohydride ($LiBH_4$), potassium borohydride (KBH_4), ammonium borohydride (NH_4BH_4), tetramethyl ammonium borohydride ($(CH_3)_4NBH_4$), quaternary borohydrides, and mixtures thereof.

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IN THE CLAIMS:

Cancel claims 2, 5-7, 9, 11, 13, 14 and 18-24.

Please add the following new claims:

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25. (new) Apparatus for use in a system for generating hydrogen, said apparatus comprising

a fuel container having an internal pressure;

a reactant material capable of generating hydrogen disposed within said container;

said container having an outlet port which can be opened and closed, said internal pressure pushing said reactant material through said outlet port when it is open.

26. (new) The apparatus of claim 25 wherein said reactant material at least one of $NaBH_4$, $LiBH_4$, KBH_4, $Mg(BH_4)_2$, $Ca(BH_4)_2$, NH_4BH_4, $(CH_3)_4NBH_4$, $NaAlH_4$, $LiAlH_4$, $KAlH_4$, $NaGaH_4$, $LiGaH_4$, and $KGaH_4$.

27. (new) The apparatus of claim 25 wherein said container also includes a stabilizer agent.

28. (new) The apparatus of claim 25 wherein said stabilizer agent includes at least one of sodium hydroxide, lithium hydroxide, potassium hydroxide and compounds including lead, tin, cadmium, zinc, gallium and mercury.

29. (new) The apparatus of claim 25 wherein said internal pressure is provided by a gas.

30. (new) The apparatus of claim 29 wherein said gas is nitrogen.

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31. (new) The apparatus of claim 29 wherein said gas is hydrogen

32. (new) The apparatus of claim 31 wherein said hydrogen gas is a portion of the hydrogen generated by said system.

33. (new) The apparatus of claim 25 wherein said container further includes a fuel level sensor that monitors the level of reactant material in said container.

34. (new) The apparatus of claim 33 wherein said fuel level sensor provides signals when the amount of reactant material is at first and second predetermined levels.

35. (new) The apparatus of claim 25 further comprising a piston disposed in said container, said piston moving in response to said source of pressure so as to push said reactant material through said outlet port.

36. (new) The apparatus of claim 35 wherein said reactant material is selected from the group comprising $NaBH_4$, $LiBH_4$, KBH_4, $Mg(BH_4)_2$, $Ca(BH_4)_2$, NH_4BH_4, $(CH_3)_4NBH_4$, $NaAlH_4$, $LiAlH_4$, $KAlH_4$, $NaGaH_4$, $LiGaH_4$, $KGaH_4$ and mixtures thereof.

37. (new) The apparatus of claim 35 wherein said internal pressure is provided by a gas.

38. (new) The apparatus of claim 37 wherein said gas is nitrogen.

39. (new) The apparatus of claim 37 wherein said gas is hydrogen.

40. (new) The apparatus of claim 39 wherein said hydrogen gas is a portion of the hydrogen generated by said system.

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41. (new) The apparatus of claim 25 further comprising a bladder disposed in said container and containing said reactant material, said bladder deforming in response to said internal pressure so as to push said reactant material through said outlet port.

42. (new) A method for use in a system for generating hydrogen, said method comprising the steps of

providing reactant material capable of generating hydrogen in a fuel container having an internal pressure, said container having an outlet port which can be opened and closed, said internal pressure pushing said reactant material through said outlet port when it is open; and

opening said output port.

43. (new) Apparatus for use in a system for generating hydrogen and a spent material from a reactant material, said apparatus comprising

a fuel container having first and second portions separated by a partitioning element, said first portion having an output port said second portion having an input port;

a reactant material capable of generating hydrogen disposed within said first portion,

and wherein said partitioning element is configured so as to move and decrease the volume of said first portion as said reactant material is outputted through said output port during operation of said system and said spent material is inputted through said input port to said second portion.

44. (new) The apparatus of claim 43 wherein said partitioning element includes a piston.

45. (new) The apparatus of claim 43 wherein said partitioning element includes at least one flexible bladder.

46. (new) An arrangement for generating hydrogen gas comprising:

(a) a catalyst chamber comprising a catalyst,

(b) a fuel chamber configured to retain a reactant material under a predetermined pressure, said reactant material capable of generating hydrogen gas when contacting said catalyst,

(c) a spent fuel chamber connected to the catalyst chamber for receiving said reactant material after its contact with said catalyst and for receiving hydrogen gas generated by the contact of the reactant material with the catalyst.

47. (new) The arrangement of claim 46 wherein the pressure is provided by a gas and said fuel chamber includes an exit valve, and the pressure pushing said reactant material from said fuel chamber when said exit valve is opened.

48. (new) The arrangement of claim 46 wherein the gas is nitrogen.

49. (new) The arrangement of claim 46 wherein the gas is hydrogen.

50. (new) The arrangement of claim 46 wherein the fuel chamber comprises a bladder which is subject to the pressure in the fuel chamber so as to push said reactant material from said fuel chamber when said exit valve is opened.

51. (new) The arrangement of claim 47 wherein the fuel chamber comprises a piston, said piston being responsive to said pressure so as to push said reactant material from said fuel chamber when said exit valve is opened.

52. (new) The arrangement of claim 46 further comprising a pump located in between the fuel chamber and catalyst chamber.

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53. (new) The arrangement of claim 46 wherein the fuel chamber comprises a fuel sensor and further comprising a main fuel tank connected to a fuel pump which, in turn, is connected to the fuel chamber.

54. (new) The arrangement of claim 46 further comprising a main spent fuel tank connected to the spent fuel chamber.

55. (new) The arrangement of claim 46 further comprising a volume exchange tank having a fuel area portion, a spent fuel area portion and a movable partition therebetween, wherein the fuel area portion is connected to the fuel chamber and the spent fuel area portion is connected to the spent fuel chamber.

56. (new) The arrangement of claim 46 further comprising a volume exchange tank having a fuel area portion and a spent fuel area portion wherein at least of one of said fuel area portion and said spent fuel area portion includes a flexible bladder.

57. (new) The arrangement of claim 46 further comprising a plurality of tanks connected to the fuel chamber and spent fuel chamber.

58. (new) A method of generating hydrogen gas comprising:

providing a catalyst;

providing a fuel chamber containing a reactant material under pressure, said reactant material capable of generating hydrogen upon contact with said catalyst; and

bringing said reactant material and said catalyst into contact with one another using said pressure.

59. (new) The method of claim 58 wherein the fuel chamber comprises a piston which in response to the pressure pushes the reactant material out of the fuel chamber and into contact with the catalyst.

60. (new) The method of claim 58 wherein the fuel chamber comprises a bladder and wherein the pressure flexes the bladder so as to push the reactant material out of the fuel chamber and into contact with the catalyst.

61. (new) The method of claim 58 comprising the step of using a fuel pump to assist the pressure in bringing said reactant material in said fuel chamber into contact with the catalyst.

62. (new) The method of claim 58 wherein said reactant material is converted into spent fuel after contact with said catalyst and said method further comprising the step of

coupling said spent fuel to a spent fuel chamber;

sensing the amount of spent fuel in said spent fuel chamber and

reducing the amount of spent fuel in said spent fuel chamber when said sensed spent fuel in said spent fuel chamber reaches a predetermined level.

63. (new) The method of claim 58 wherein said reactant material is converted into spent fuel after contact with said catalyst and said method further comprising the steps of:

coupling said spent fuel to a spent fuel chamber;

providing a volume exchange tank having first and second portions separated by movable partition, said a reactant material being disposed in said first portion

adding reactant material from said first portion into said fuel chamber, said first portion decreasing in volume as said refilling proceeds, and

draining said spent fuel from said spent fuel chamber into said second portion.

64. (new) The method of claim 63 wherein said movable partition includes at least one bladder.

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65. (new) The method of claim 63c wherein said movable partition includes a piston.

REMARKS

The specification is being amended to correct the chemical formula for tetramethyl ammonium borohydride. New claims are being submitted and other claims are being cancelled.

Please associate this application with Customer No. 26345 and direct all correspondence regarding this application to: